

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Brian G. Brannon on 12/8/2008.
3. The application has been amended as follows:

Amendments to the Claims

4. Please cancel claims 19 and 20.
5. Please amend claims 1 and 9 as follows:

Claim 1 (Currently Amended): An active management system for controlling real-time operation of a Small Office/Home Office (SOHO) network having a SOHO network device and an active management personal computer, the active management system for controlling real-time operation of the SOHO network device comprising:

an active management console device configured to operate in the active management personal computer, the

active management console module for enabling real-time communication of active management queries to configure the SOHO network device from the active management personal computer to the SOHO network device during operation of the SOHO network device on an active communication link; and

an active management agent device, remote from the active management console device, configured to operate in the SOHO network device for communicating real-time active management queries to configure the SOHO network device in real-time between the active management console device and the SOHO network device on the active communication link;

wherein the active communication link comprises a communication link transmitting functional information relating to the operation of the gateway device and data traffic.

Claim 9 (Currently Amended): A method for enabling real-time user input for implementing active management gateway functions in a Small Office/Home Office (SOHO) network having an active management computer and a gateway device, the method comprising:

receiving one or more data packets that trigger a code to implement an active management gateway function;

in response to receiving the one or more data packets, sending an active management query from the gateway device to an active management console module at the active management computer using an active communication channel, the active management computer remote from the gateway device;

receiving, at the gateway device, an active management query response from the active management console module at the active management computer via the active communication channel, the active management query response for configuring the gateway device; and

in response to receiving the active management query response at the gateway device, implementing the active management gateway function at the gateway device in real-time according to the information provided in the active management query response;

wherein the active communication link comprises a communication link transmitting functional information

relating to the operation of the gateway device and data traffic.

Amendments to the Specification

6. Please amend the specification as following:

Please amend paragraph [0005] as follows:

[0005] Examples of such network devices include SOHO gateways (also referred ~~refer~~ to as routers), hardware firewalls, wireless network access points, and the like. These network devices may combine several functions, such as, for example, a SOHO gateway device may include a firewall function, network address translation (“NAT”), dynamic host configuration services (“DHCP”), content filtering, ad blocking, virtual server functions, wireless networking functions, and the like. However, even these multifunctional conventional SOHO gateways lack ongoing, real-time communication links between the network device and the user as described above. For example, unlike their software counterparts, SOHO hardware firewalls, or multifunction SOHO gateways with hardware firewall features, must be configured statically at some time, e.g., during installation, with a set of firewall rules that are subsequently implemented during the hardware firewall operation, without further user input. In contrast, software or personal firewalls running on individual computers provide real time interaction with the user by issuing notifications to the user and asking for user input, for example, to enable certain applications to access the Internet, to block unsolicited attempts to access computer ports, and the like.

Please amend paragraph [0033] as follows:

[0033] SOHO network device 106 active management features provide solutions to problems previously not addressed by conventional hardware gateway devices. For example, according to one embodiment of the present invention wherein the SOHO network device 106 is a gateway, a user operating a SOHO PC 109 connected to the Internet through the gateway may inadvertently download a Trojan horse program to the SOHO PC 109. The Trojan horse program scours the SOHO PC 109 for confidential or sensitive information and when it attempts to upload the information to a server in the Internet, a firewall feature in the SOHO network device 106 triggers a pop-up window in the display of the active management PC 108 prompting for an option to allow or deny the outbound connection. Unlike conventional hardware firewall devices, which typically default to allow all outbound data transfers, the firewall feature in the gateway provides an option for the user to allow or deny an outbound connection to certain server servers in the Internet.

Please amend paragraph [0038] as follows:

[0038] In addition, the active management agent module 114 maintains a protocol stack 126 particularly defining the communications between the active management agent module 114 and the active management console module 116 (the communication protocol is further discussed herein in subsequent sections). Likewise, the active management console module 116 includes a protocol stack 126 for bi-directional communication. The active management console module 116 optionally includes a user interface application programming interface (“API”) 128. The user interface API provides an interface for the active management console module 116 to communicate to the user through different user interfaces. In one embodiment of the present invention, ~~an~~ a hypertext mark-up language (“HTML”) interface is provided for a web browser

based user interface. The same user interface can be shared between the active management system and the SOHO network device 106 conventional configuration utility.

Please amend paragraph [0046] as follows:

[0046] The ~~communications~~ communication between the active management agent module 114 and the active management console module 116 is based on a communications protocol that defines a set of messages. No protocol currently exists which includes all of the capabilities necessary to implement the features described above. One embodiment of the present invention includes a proprietary protocol to define the communication messages between the active management agent module 114 and the active management console module 116. However, there are a number of existing protocols that could be extended and customized to be able to support the SOHO network device 106 active management features. The following are some examples of existing protocols that can serve as a basis for a customized protocol:

Drawings

7. The drawings filed on 1/22/04 are acknowledged.

Allowable Subject Matter

8. Claims 1-16 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The

examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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/Haresh N. Patel/

Primary Examiner, Art Unit 2454

12/10/08